

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-145 (Cancelled).

146. (Previously Presented) A method for providing access to a network system which comprises a network, the method comprising:

- a first access point coupled to the network receiving identification information from a portable computing device in a wireless manner, wherein the identification information indicates a first VLAN of a plurality of possible VLANs;

- wherein each of at least a subset of the plurality of possible VLANs corresponds to a respective network service provider;

- the first access point determining the first VLAN of the plurality of possible VLANs for the portable computing device after receiving the identification information;

- the first access point receiving data from the portable computing device; and

- providing the received data to a first network service provider based on the first VLAN determined in said determining.

147. (Previously Presented) The method of claim 146,

- wherein the first VLAN corresponds to a first network destination;

- wherein said providing comprises providing the received data to the first network destination using the first VLAN.

148. (Previously Presented) The method of claim 146,

- wherein each of the plurality of possible VLANs corresponds to a respective network destination of a plurality of possible network destinations;

- wherein the first VLAN corresponds to a first network destination;

- wherein said providing comprises providing the received data to the first network destination using the first VLAN.

149. (Previously Presented) The method of claim 148,
wherein the use of different VLANs for different network destinations operates to separate data traffic on the network for each of the network destinations.

150. (Previously Presented) The method of claim 148,
wherein at least a subset of the network destinations comprise wireless service providers.

151. (Previously Presented) The method of claim 148,
the first access point coupled to the network receiving second identification information from a second portable computing device in a wireless manner, wherein the second identification information indicates a second VLAN of the plurality of possible VLANs;

the first access point determining the second VLAN of the plurality of possible VLANs for the second portable computing device after receiving the second identification information;

the first access point receiving second data from the second portable computing device; and

providing the received second data to a second network service provider based on the second VLAN determined in said determining.

152. (Previously Presented) The method of claim 146, further comprising:

the first access point receiving second identification information from a second portable computing device in a wireless manner, wherein the second identification information indicates a second VLAN of the plurality of possible VLANs;

the first access point determining the second VLAN of the plurality of possible VLANs after receiving the second identification information;

the first access point receiving second data from the second portable computing device; and

providing the second received data to a second network service provider based on the second VLAN determined in said determining.

153. (Currently Amended) The method of claim 146,
wherein the network system includes a memory medium which stores a data structure comprising a list of identification information entries and a corresponding list of the plurality of possible VLANs; and
wherein said determining the first VLAN of the plurality of possible VLANs includes accessing the memory medium and using the received identification information to determine the first VLAN.

154. (Previously Presented) The method of claim 153,
wherein said determining the first VLAN of the plurality of possible VLANs comprises indexing into the data structure using the identification information to determine the first VLAN of the plurality of possible VLANs stored in the data structure corresponding to the identification information.

155. (Previously Presented) The method of claim 153, wherein the memory medium is comprised in the first access point.

156. (Previously Presented) The method of claim 153,
wherein the data structure further comprises associated methods for providing data to the network; and
wherein said determining the first VLAN of the plurality of possible VLANs includes accessing the memory medium and using the received identification information to determine the first VLAN and an associated method for providing data to the network.

157. (Previously Presented) The method of claim 146,
wherein the identification information comprises a System Identification.

158. (Previously Presented) The method of claim 157, wherein the System Identification comprises one or more of a wireless Ethernet Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

159. (Previously Presented) The method of claim 158, wherein the BSSID comprises a media access control (MAC) ID.

160. (Previously Presented) The method of claim 146, further comprising:
determining an access level for the portable computing device after receiving the identification information;

wherein said providing the received data to the first network service provider based on the first VLAN determined in said determining is based on the determined access level.

161. (Previously Presented) The method of claim 146, further comprising:
the first access point concurrently using a plurality of radio frequency (RF) channels for communicating with one or more portable computing devices.

162. (Currently Amended) The method of claim 161, wherein a first RF channel of the plurality of RF channels and a second RF channel of the plurality of RF channels are non-overlapping RF channels.

163. (Previously Presented) The method of claim 146, wherein the network is operable to support IEEE 802.1p.

164. (Previously Presented) The method of claim 146, wherein the network is operable to enforce a predefined quality of service (QoS) metric to the first VLAN.

165. (Previously Presented) The method of claim 146, further comprising:

the first access point broadcasting a plurality of possible System Identifications (SIDs), wherein each of the plurality of possible SIDs is associated with at least one VLAN of the plurality of possible VLANs.

166. (Previously Presented) The method of claim 165,
wherein said broadcasting the plurality of possible SIDs includes a beacon format.

167. (Previously Presented) The method of claim 146, wherein the first access point is arranged at a known geographic location, the method further comprising:

providing network access to the portable computing device using the first VLAN determined in said determining; and

determining a geographic location of the portable computing device;

wherein said providing network access comprises selectively providing network access to the portable computing device based on the determined geographic location of the portable computing device.

168. (Previously Presented) The method of claim 146, wherein the first access point is arranged at a known geographic location, the method further comprising:

providing network access to the portable computing device using the first VLAN determined in said determining;

wherein said providing network access comprises selectively providing network access to the portable computing device based on the known geographic location of the first access point.

169. (Previously Presented) The method of claim 146, wherein the first access point is arranged at a known geographic location, the method further comprising:

providing network access to the portable computing device using the first VLAN determined in said determining; and

determining an access level for the portable computing device after receiving the identification information;

wherein said providing network access comprises selectively providing network access to the portable computing device based on the known geographic location of the first access point and the determined access level.

170. (Previously Presented) The method of claim 146, further comprising:
assigning a wireless communication channel for communication between the first access point and the portable computing device.

171. (Previously Presented) The method of claim 170, wherein the first access point assigns the wireless communication channel for communication between the first access point and the portable computing device.

172. (Previously Presented) The method of claim 170, wherein said assigning comprises assigning the wireless communication channel based on the identification information received from the portable computing device.

173. (Previously Presented) A method for providing access to a network system which comprises a network, the method comprising:

a first access point coupled to the network receiving identification information from a portable computing device in a wireless manner, wherein the identification information indicates a first VLAN of a plurality of possible VLANs;

wherein at least a subset of each of the plurality of possible VLANs corresponds to a respective network service provider of a plurality of possible network service providers;

the first access point determining the first VLAN of the plurality of possible VLANs for the portable computing device after receiving the identification information, wherein the first VLAN corresponds to a first network service provider;

the first access point receiving data from the portable computing device; and
providing the received data to the first network service provider using the first VLAN determined in said determining.

174. (Previously Presented) A network system, comprising:
a network; and
a first wireless access point coupled to the network, wherein the first wireless access point is operable to communicate with a portable computing device, wherein the first wireless access point is configured to receive identification information from the portable computing device indicating a VLAN of a plurality of possible VLANs;
wherein each of at least a subset of the plurality of possible VLANs corresponds to a respective network service provider of a plurality of possible network service providers;
wherein the first wireless access point is operable to determine the VLAN indicated in the identification information, wherein the determined VLAN corresponds to a first network service provider; and
wherein the first wireless access point is operable to provide network access to the portable computing device through the first network service provider.

175. (Currently Amended) The system of claim 174,
wherein each of the plurality of possible VLANs corresponds to a respective network destination of a plurality of possible network destinations;
wherein the first VLAN corresponds to a first network destination;
wherein the first wireless access point is operable to receive data from the portable computing device and provide the received data to the first network destination using the first VLAN.

176. (Previously Presented) The system of claim 175,
wherein the use of different VLANs for different network destinations operates to separate data traffic on the network for each of the network destinations.

177. (Currently Amended) A network system, comprising:
a plurality of wireless access points coupled to a network, wherein each of the plurality of wireless access points is operable to communicate with a portable computing device in a wireless fashion, wherein each of the plurality of wireless access points is

configured to receive identification information from the portable computing device indicating a VLAN of a plurality of possible VLANs;

wherein each of the plurality of access points is operable to determine the VLAN indicated by the identification information;

wherein each of the plurality of wireless access points is operable to provide network access to the portable computing device through the determined VLAN;

wherein each of at least a subset of the plurality of possible VLANs is associated with a respective network service provider; and

wherein [[the first access point]] a first of the access points is operable to maintain an association between each of the at least a subset of the plurality of possible VLANs and the respective network provider.

178. (Cancelled)

179. (Previously Presented) The network system of claim 177,

wherein network access is provided to the portable computing device through the first access point, the determined VLAN, and the respective network provider.

180. (Previously Presented) The network system of claim 177,

wherein the identification information comprises a System ID (SID) of a plurality of possible SIDs; and

wherein the first access point is operable to recognize the SID of the plurality of possible SIDs, wherein each of the plurality of possible SIDs is associated with a respective one of the plurality of possible VLANs.

181 (Previously Presented) The network system of claim 180,

wherein at least a subset of the plurality of possible SIDs comprises one or more of a Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

182. (Currently Amended) The network system of claim 180,
wherein the first access point is operable to maintain associations between the plurality of possible SIDs and the plurality of [[the plurality of]] possible VLANs.

183. (Currently Amended) The network system of claim 180,
wherein each of at least a subset of the plurality of possible VLANs is associated with a respective service provider; and

wherein the first access point is operable to maintain associations between each of at least a subset of the plurality of possible SIDs and a plurality of active subscribers of each service provider.

184. (Previously Presented) The network system of claim 180,
wherein the first access point is operable to broadcast at least a subset of the plurality of possible SIDs, wherein each of the plurality of possible SIDs is associated with a respective one of the plurality of VLANs.

185. (Previously Presented) The network system of claim 184,
wherein the first access point is operable to use a beacon format to broadcast the at least a subset of the plurality of possible SIDs.

186. (Previously Presented) The network system of claim 184,
wherein the at least a subset of the plurality of possible SIDs comprises one or more of a Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

187. (Previously Presented) The network system of claim 177, wherein at least one of said plurality of access points comprises computer software which implements a plurality of virtual access points, wherein each virtual access point of the plurality of virtual access points corresponds to one of the plurality of possible VLANs, and wherein each virtual access point of the plurality of virtual access points provides network access services to one or more portable computing devices through the corresponding VLAN.

188. (Previously Presented) The network system of claim 187, wherein each virtual access point of the plurality of virtual access points provides access point functionality implemented in software, wherein each virtual access point of the plurality of virtual access points appears as a physical access point to the portable computing device.

189. (Previously Presented) The network system of claim 187, wherein each virtual access point of the plurality of virtual access points executes a wireless protocol stack.

190. (Previously Presented) The network system of claim 189, wherein the wireless protocol stack comprises an IEEE 802.11 protocol stack.

191. (Previously Presented) The network system of claim 187, wherein each virtual access point of the plurality of virtual access points includes an Extended Service Set ID (ESSID), and wherein each ESSID corresponds to one of the plurality of possible VLANs.

192. (Previously Presented) The network system of claim 177, further comprising:

- a memory medium coupled to the network which stores a data structure comprising a list of identification information entries and a corresponding list of the plurality of possible VLANs;

- wherein, in said determining the VLAN, each of the plurality of access points is operable to access the memory medium and use the received identification information to determine the VLAN.

193. (Previously Presented) The network system of claim 192, wherein the memory medium is comprised in one or more of the plurality of access points.

194. (Previously Presented) The network system of claim 177, wherein the plurality of access points are maintained by a first network service provider; and

wherein the identification information indicates a second network service provider.

195. (Previously Presented) The network system of claim 177, wherein the plurality of access points are arranged at known locations in a geographic region, wherein each access point is operable to provide geographic location information indicating a known geographic location of the portable computing device; and

wherein network access is selectively provided to the portable computing device based on the known geographic location of the portable computing device.

196. (Previously Presented) The network system of claim 177, wherein the first access point is operable to assign a wireless communication channel for communication between the first access point and the portable computing device.

197. (Previously Presented) The network system of claim 177, wherein one or more of the plurality access points are operable to assign a wireless communication channel based on one or more of:

the identification information received from the portable computing device, and
a determined access level for the portable computing device, wherein said access level is determined by one of said one or more of the access points after receiving the identification information.

198. (Previously Presented) The network system of claim 177, wherein one or more of the plurality access points are operable to assign a quality of service (QoS) based on one or more of:

the identification information received from the portable computing device, and
a determined access level for the portable computing device, wherein said access level is determined by one of said one or more of the access points after receiving the identification information.

199. (Previously Presented) The network system of claim 177, wherein the network is operable to support IEEE 802.1p.

200. (Previously Presented) The network system of claim 177,
wherein the first access point is operable to concurrently use a plurality of radio frequency (RF) channels for communicating with one or more portable computing devices.

201. (Currently Amended) The network system of claim 200, wherein a first RF channel of the plurality of RF channels and a second RF channel of the plurality of RF channels are non-overlapping RF channels.

202. (Previously Presented) A method for operating a network system, the method comprising:

a first access point coupled to a network receiving identification information from a portable computing device in a wireless manner;

the first access point determining a VLAN tag corresponding to the identification information, wherein the VLAN tag corresponds to a first network provider;

the first access point receiving data from the portable computing device in a wireless manner; and

providing the VLAN tag and the data received from the portable computing device to the network, wherein the VLAN tag is usable by the network to route the data received from the portable computing device based on the first network provider.

203. (Previously Presented) The method of claim 202, wherein the first access point and the portable computing device communicate using wireless Ethernet.

204. (Previously Presented) The method of claim 202,
wherein the identification information comprises a System Identification.

205. (Previously Presented) The method of claim 204, wherein the System Identification comprises one or more of a wireless Ethernet Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

206. (Previously Presented) The method of claim 202, wherein said determining comprises accessing a memory medium coupled to the network to determine the VLAN tag corresponding to the identification information.

207. (Previously Presented) The method of claim 206, wherein the memory medium comprises a data structure which includes a list of identification information entries and a corresponding list of VLAN tags.

208. (Previously Presented) The method of claim 207, wherein said determining comprises using the identification information to index into the data structure using the identification information to determine the VLAN tag.

209. (Previously Presented) The method of claim 206, wherein the first access point comprises the memory medium.

210. (Previously Presented) The method of claim 202, wherein the identification information comprises a media access control (MAC) ID.

211. (Previously Presented) The method of claim 202, wherein the identification information comprises a digital certificate.

212. (Previously Presented) The method of claim 202, further comprising:
the first access point receiving second identification information from a second portable computing device in a wireless manner;
the first access point determining a second VLAN tag corresponding to the second identification information, wherein the second VLAN tag corresponds to a second network provider;

the first access point receiving second data from the second portable computing device in a wireless manner; and

providing the second VLAN tag and the second data received from the second portable computing device to the network, wherein the second VLAN tag is usable by the network to route the second data received from the second portable computing device based on the second network provider;

wherein the identification information is different from the second identification information; and

wherein the first network provider is different from the second network provider.

213. (Previously Presented) The method of claim 212,
wherein the second identification information comprises a System Identification.

214. (Previously Presented) The method of claim 213, wherein the System Identification comprises one or more of a wireless Ethernet Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

215. (Previously Presented) The method of claim 202, further comprising:
determining a quality of service based on the received identification information;
wherein said providing the VLAN tag and the data received from the portable computing device to the network is based on the quality of service.

216. (Currently Amended) The method of claim 202, wherein the VLAN tag comprises quality of service information, wherein the quality of service information indicates a quality of service;

wherein the network is operable to route the data received from the portable computing device to [[the]] a network destination based on the quality of service indicated by the quality of service information.

217. (Previously Presented) The method of claim 202, further comprising:
a computer system at the network destination receiving the data from the portable computing device; and
providing network access to the portable computing device.

218. (Currently Amended) The method of claim 202, wherein the first access point is arranged at a known geographic location, the method further comprising:
the first access point providing geographic location information indicating a known geographic location of the portable computing device;
a computer system at ~~[[the]]~~ a network destination receiving the data from the portable computing device; and
providing network access to the portable computing device;
wherein said providing network access comprises selectively providing network access to the portable computing device based on the known geographic location of the portable computing device.

219. (Currently Amended) The method of claim 202, wherein the first access point is arranged at a known geographic location, the method further comprising:
the first access point providing geographic location information indicating a known geographic location of the portable computing device;
a computer system at ~~[[the]]~~ a network destination receiving the data from the portable computing device;
providing network access to the portable computing device; and
determining an access level for the portable computing device after receiving the identification information;
wherein said providing network access comprises selectively providing network access to the portable computing device based on the known geographic location of the portable computing device and the determined access level.

220. (Previously Presented) The method of claim 202, further comprising:
the first access point concurrently using a plurality of radio frequency (RF) channels for communicating with one or more portable computing devices.

221. (Currently Amended) The method of claim 220, wherein a first RF channel of the plurality of RF channels and a second RF channel of the plurality of RF channels are non-overlapping RF channels.

222 – 255. (Cancelled)

256. (Currently Amended) A computer readable [[carrier]] memory medium comprising program instructions for providing access to a network system, wherein the program instructions are executable by a wireless access point to:

receive identification information from a portable computing device in a wireless manner, wherein the identification information indicates a first VLAN of a plurality of possible VLANs;

wherein each of at least a subset of the plurality of possible VLANs corresponds to a respective network service provider;

determine the first VLAN of the plurality of possible VLANs for the portable computing device after receiving the identification information, wherein the first VLAN corresponds to a first network service provider;

receive data from the portable computing device; and

providing the received data to a network using the first VLAN.

257. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256,

wherein the first VLAN corresponds to a first network destination;

wherein, in said providing, the program instructions are further executable by the wireless access point to provide the received data to the first network destination using the first VLAN.

258. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256,

wherein each of the plurality of possible VLANs corresponds to a respective network destination of a plurality of possible network destinations;

wherein the first VLAN corresponds to a first network destination;

wherein, in said providing, the program instructions are further executable by the wireless access point to provide the received data to the first network destination using the first VLAN.

259. (Currently Amended) The computer readable [[carrier]] memory medium of claim 258,

wherein the use of different VLANs for different network destinations operates to separate data traffic on the network for each of the network destinations.

260. (Currently Amended) The computer readable [[carrier]] memory medium of claim 258,

wherein at least a subset of the network destinations comprise wireless service providers.

261. (Currently Amended) The computer readable [[carrier]] memory medium of claim 258, wherein the program instructions are further executable by the wireless access point to:

receive second identification information from a second portable computing device in a wireless manner, wherein the second identification information indicates a second VLAN of the plurality of possible VLANs;

determine the [[first]] second VLAN of the plurality of possible VLANs for the second portable computing device after receiving the second identification information;

receive data from the second portable computing device; and

provide the received data to the network using the [[first]] second VLAN.

262. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the program instructions are further executable by the wireless access point to:

receive second identification information from a second portable computing device in a wireless manner, wherein the second identification information indicates a second VLAN of the plurality of possible VLANs;

determine the second VLAN of the plurality of possible VLANs after receiving the second identification information;

receive second data from the second portable computing device; and

provide the second received data to the network using the second VLAN.

263. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256,

wherein, in said determining the first VLAN of the plurality of possible VLANs, the program instructions are further executable by the wireless access point to access a memory medium coupled to the network and use the received identification information to determine the first VLAN, wherein the memory medium [[which]] stores a data structure comprising a list of identification information entries and a corresponding list of the plurality of possible VLANs.

264. (Currently Amended) The computer readable [[carrier]] memory medium of claim 263,

wherein, in said determining the first VLAN of the plurality of possible VLANs, the program instructions are further executable by the wireless access point to index into the data structure using the identification information to determine the first VLAN of the plurality of possible VLANs stored in the data structure corresponding to the identification information.

265. (Currently Amended) The computer readable [[carrier]] memory medium of claim 263, wherein the memory medium is comprised in the first access point.

266. (Currently Amended) The computer readable [[carrier]] memory medium of claim 263,

wherein the data structure further comprises associated methods for providing data to the network; and

wherein, in said determining the first VLAN of the plurality of possible VLANs, the program instructions are further executable by the wireless access point to access the memory medium and use the received identification information to determine the first VLAN and an associated method for providing data to the network.

267. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256,

wherein the identification information comprises a System Identification.

268. (Currently Amended) The computer readable [[carrier]] memory medium of claim 267, wherein the System Identification comprises one or more of a wireless Ethernet Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

269. (Currently Amended) The computer readable [[carrier]] memory medium of claim 268, wherein the BSSID comprises a media access control (MAC) ID.

270. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the program instructions are further executable by the wireless access point to:

determine an access level for the portable computing device after receiving the identification information;

wherein, in said providing the received data to the network using the first VLAN, the program instructions are further executable by the wireless access point to provide the received data to the network using the first VLAN based on the determined access level.

271. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the program instructions are further executable by the wireless access point to:

concurrently use a plurality of radio frequency (RF) channels for communicating with one or more portable computing devices.

272. (Currently Amended) The computer readable [[carrier]] memory medium of claim 271, wherein a first RF channel of the plurality of RF channels and a second RF channel of the plurality of RF channels are non-overlapping RF channels.

273. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the program instructions are further executable by the wireless access point to:

broadcast a plurality of possible System Identifications (SIDs), wherein each of the plurality of possible SIDs is associated with at least one VLAN of the plurality of possible VLANs.

274. (Currently Amended) The computer readable [[carrier]] memory medium of claim 273,

wherein, in said broadcasting the plurality of possible SIDs, the program instructions are further executable by the wireless access point to use a beacon format.

275. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the wireless access point is arranged at a known geographic location;

wherein the program instructions are further executable by the wireless access point to:

determine a geographic location of the portable computing device; and
provide network access to the portable computing device using the first VLAN determined in said determining, wherein, in said providing network access, the program instructions are further executable by the wireless access point to selectively

provide network access to the portable computing device based on the determined geographic location of the portable computing device.

276. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the wireless access point is arranged at a known geographic location; wherein the program instructions are further executable by the wireless access point to:

provide [[providing]] network access to the portable computing device using the first VLAN determined in said determining, wherein, in said providing network access, the program instructions are further executable by the wireless access point to selectively provide network access to the portable computing device based on the known geographic location of the wireless access point.

277. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the wireless access point is arranged at a known geographic location; wherein the program instructions are further executable by the wireless access point to:

determine an access level for the portable computing device after receiving the identification information; and

provide network access to the portable computing device using the first VLAN determined in said determining, wherein, in said providing network access, the program instructions are further executable by the wireless access point to selectively provide network access to the portable computing device based on the known geographic location of the first access point and the determined access level.

278. (Currently Amended) The computer readable [[carrier]] memory medium of claim 256, wherein the program instructions are further executable by the wireless access point to:

assign a wireless communication channel for communication between the first access point and the portable computing device.

279. (Currently Amended) The computer readable [[carrier]] memory medium of claim 278,

wherein, in said assigning, the program instructions are further executable by the wireless access point to assign the wireless communication channel based on the identification information received from the portable computing device.

280 – 282. (Cancelled)

283. (Previously Presented) A method for providing access to a network system which comprises a network, the method comprising:

a first access point coupled to the network receiving identification information from a portable computing device in a wireless manner, wherein the identification information indicates a first VLAN of a plurality of possible VLANs;

the first access point determining the first VLAN of the plurality of possible VLANs for the portable computing device after receiving the identification information;

the first access point receiving data from the portable computing device; and

providing the received data to the network using the first VLAN determined in said determining;

wherein each of the plurality of possible VLANs corresponds to a respective network destination of a plurality of possible network destinations, wherein at least a subset of the network destinations comprise wireless service providers;

wherein the first VLAN corresponds to a first network destination;

wherein said providing comprises providing the received data to the first network destination using the first VLAN.

284. (Previously Presented) A network system, comprising:

a plurality of wireless access points coupled to a network, wherein each of the plurality of wireless access points is operable to communicate with a portable computing device in a wireless fashion, wherein each of the plurality of wireless access points is configured to receive identification information from the portable computing device indicating a VLAN of a plurality of possible VLANs;

wherein each of the plurality of access points is operable to determine the VLAN indicated by the identification information;

wherein each of the plurality of wireless access points is operable to provide network access to the portable computing device through the determined VLAN;

wherein each of at least a subset of the plurality of possible VLANs is associated with a respective network service provider.

285. (Currently Amended) The network system of claim 284,
wherein network access is provided to the portable computing device through [[the first access point]] a first of the access points, the determined VLAN, and the respective network provider.

286. (Previously Presented) A network system, comprising:
a plurality of wireless access points coupled to a network, wherein each of the plurality of wireless access points is operable to communicate with a portable computing device in a wireless fashion, wherein each of the plurality of wireless access points is configured to receive identification information from the portable computing device indicating a VLAN of a plurality of possible VLANs;

wherein each of the plurality of access points is operable to determine the VLAN indicated by the identification information;

wherein each of the plurality of wireless access points is operable to provide network access to the portable computing device through the determined VLAN;

wherein the identification information comprises a System ID (SID) of a plurality of possible SIDs; and

wherein the first access point is operable to recognize the SID of the plurality of possible SIDs, wherein each of the plurality of possible SIDs is associated with a respective one of the plurality of possible VLANs;

wherein at least a subset of the plurality of possible SIDs comprises one or more of a Service Set ID (SSID), an Extended Service Set ID (ESSID), and a Basic Service Set ID (BSSID).

287. (Currently Amended) A network system, comprising:

a plurality of wireless access points coupled to a network, wherein each of the plurality of wireless access points is operable to communicate with a portable computing device in a wireless fashion, wherein each of the plurality of wireless access points is configured to receive identification information from the portable computing device indicating a VLAN of a plurality of possible VLANs;

wherein each of the plurality of access points is operable to determine the VLAN indicated by the identification information;

wherein each of the plurality of wireless access points is operable to provide network access to the portable computing device through the determined VLAN;

wherein the identification information comprises a System ID (SID) of a plurality of possible SIDs; and

wherein [[the first access point]] a first of the access points is operable to recognize the SID of the plurality of possible SIDs, wherein each of the plurality of possible SIDs is associated with a respective one of the plurality of possible VLANs;

wherein each of at least a subset of the plurality of possible VLANs is associated with a service provider; and

wherein the first access point is operable to maintain associations between each of at least a subset of the plurality of possible SIDs and a plurality of active subscribers of each service provider.

288. (Previously Presented) A network system, comprising:

a plurality of wireless access points coupled to a network, wherein each of the plurality of wireless access points is operable to communicate with a portable computing device in a wireless fashion, wherein each of the plurality of wireless access points is configured to receive identification information from the portable computing device indicating a VLAN of a plurality of possible VLANs;

wherein each of the plurality of access points is operable to determine the VLAN indicated by the identification information;

wherein each of the plurality of wireless access points is operable to provide network access to the portable computing device through the determined VLAN;

wherein the plurality of access points are maintained by a first network service provider; and

wherein the identification information indicates a second network service provider.

289. (Previously Presented) A wireless access point comprising:
a processor;
a memory medium coupled to the processor;
a port coupled to the processor, wherein the port is operable to be coupled to a network; and

a wireless transceiver coupled to the processor;
wherein the wireless transceiver is operable to receive identification information from a portable computing device in a wireless manner, wherein the identification information indicates a first VLAN of a plurality of possible VLANs, wherein each of at least a subset of the plurality of possible VLANs corresponds to a respective network service provider;

wherein the memory medium comprises program instructions which are executable by the processor to:

determine the first VLAN of the plurality of possible VLANs for the portable computing device after receiving the identification information; and

provide data received from the portable computing device to a first network service provider, wherein the first network service provider corresponds to the first VLAN.

290. (Previously Presented) The wireless access point of claim 289,
wherein the first VLAN corresponds to a first network destination;
wherein said providing comprises providing the received data to the first network destination using the first VLAN.

291. (Previously Presented) The wireless access point of claim 289,

wherein each of the plurality of possible VLANs corresponds to a respective network destination of a plurality of possible network destinations;

wherein the first VLAN corresponds to a first network destination;

wherein said providing comprises providing the received data to the first network destination using the first VLAN.

292. (Previously Presented) The wireless access point of claim 291,
wherein the use of different VLANs for different network destinations operates to separate data traffic on the network for each of the network destinations.

293. (Previously Presented) The wireless access point of claim 289,
wherein the first network service provider is a wireless service provider.

294. (Previously Presented) The wireless access point of claim 289,
wherein the wireless transceiver is operable to receive second identification information from a second portable computing device in a wireless manner, wherein the second identification information indicates a second VLAN of the plurality of possible VLANs;

wherein the program instructions are executable by the processor to:

determine the second VLAN of the plurality of possible VLANs for the second portable computing device based on the second identification information; and

provide data received from the second portable computing device to a second network service provider, wherein the second network service provider corresponds to the second VLAN.

295. (Currently Amended) The wireless access point of claim 289,
wherein the memory medium comprises a data structure comprising a list of identification information entries and a corresponding list of the plurality of possible VLANs; and

wherein, in determining the first VLAN of the plurality of possible VLANs, the program instructions are executable to access the data structure and use the received identification information to determine the first VLAN.

296. (Previously Presented) The wireless access point of claim 295, wherein the data structure further comprises associated methods for providing data to the network; and

wherein the program instructions are executable to use the received identification information to determine the first VLAN and an associated method for providing data to the network.

297. (Previously Presented) The wireless access point of claim 289, wherein the identification information comprises a System Identification.

298. (Previously Presented) The wireless access point of claim 289, wherein the program instructions are further executable to:

determine an access level for the portable computing device after receiving the identification information; and

provide the received data to the first network service provider based on the determined access level.

299. (Previously Presented) The wireless access point of claim 289, wherein the wireless access point concurrently uses a plurality of radio frequency (RF) channels for communicating with a plurality of portable computing devices.

300. (Previously Presented) The wireless access point of claim 289, wherein the wireless access point is operable to broadcast a plurality of possible System Identifications (SIDs), wherein each of the plurality of possible SIDs is associated with at least one VLAN of the plurality of possible VLANs.

301. (Previously Presented) The wireless access point of claim 289,

wherein the wireless access point is arranged at a known geographic location;

wherein the wireless access point is operable to provide network access to the portable computing device based on the known geographic location of the wireless access point.

302. (Previously Presented) The wireless access point of claim 289,

wherein the wireless access point is operable to provide network access to the portable computing device based on a determined geographic location of the portable computing device.